

California Regional Water Quality Control Board  
North Coast Region

Monitoring and Reporting Program  
Order NO. R1-2000-##\*

for

CITY OF CRESCENT CITY  
WASTEWATER TREATMENT FACILITY (WWTF)

Del Norte County

**MONITORING**

The purpose of the monitoring program is to determine compliance with the limitations contained in the NPDES Permit. The sampling devices currently in use at the Crescent City WWTF are satisfactory for the composite samples required by this monitoring program. If composite sampling devices are not used, composite grab samples may be substituted. The sampling interval for composite grab samples shall be no more than 1 hour.

**Influent Monitoring**

Influent samples shall be collected at any point in the facility headworks at which all waste flowing into the facility is present and prior to any treatment. Samples of the influent waste shall be collected on the same day that samples for effluent analyses are collected and analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
BOD <sub>5</sub> (20EC, 5 day)	mg/l	24-hour composite	Weekly
Suspended Solids	mg/l	24 hour composite	Weekly

**Effluent Monitoring**

Effluent samples shall be collected at any point following the chlorine contact chamber and before discharge to the ocean outfall line (Discharge Serial No. 001). Samples shall be analyzed for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
BOD <sub>5</sub> (20C, 5 day)	mg/l	24-hour composite	Weekly
Suspended Solids	mg/l	24 hour composite	Weekly
Settleable Matter	ml/l	Grab	Daily
Hydrogen Ion	pH	Grab	Daily
Turbidity	NTU	24-hour composite	weekly
Chlorine Residual <sup>1</sup>	mg/l	Continuous	Continuous
Fecal Coliform	MPN/100 ml	Grab	Twice Weekly

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<sup>1</sup> Following dechlorination

Grease and Oil	mg/l	Grab	Monthly
Flow	mgd	Continuous	Continuous
Arsenic	mg/l	24-hour composite	Annually
Cadmium	mg/l	24-hour composite	Annually
<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
Copper	mg/l	24-hour composite	Annually
Chromium (hexavalent)	mg/l	24-hour composite	Annually
Lead	mg/l	24-hour composite	Annually
Mercury	mg/l	24-hour composite	Annually
Nickel	mg/l	24-hour composite	Annually
Silver	mg/l	24-hour composite	Annually
Zinc	mg/l	24-hour composite	Annually
Cyanide	mg/l	24-hour composite	Annually
Ammonia (as N)	mg/l	24-hour composite	Annually
Acute Toxicity <sup>2</sup>	<sup>3</sup>	Grab	Quarterly
Chronic Toxicity <sup>4</sup>	Tu <sub>c</sub>	Grab	Quarterly
Phenolic Compounds	mg/l	Grab	Annually
Chlorinated Phenolics	mg/l	Grab	Annually
Endosulfan	mg/l	Grab	Annually
Endrin	mg/l	Grab	Annually
HCH	mg/l	Grab	Annually

One year prior to the expiration of this permit and during the dry weather flow period, composite effluent samples shall be analyzed for the constituents listed in Effluent Limitation 1, Table B "Objectives for Protection of Human Health". The results of the analyses shall be submitted as part of the permit renewal application.

### Special Effluent Monitoring

During periods of high rainfall, inflow/infiltration (I&I) causes flows in the treatment facility to exceed the capacity of the outfall. During these episodes, treated and disinfected wastewater is discharged to a storm drain tributary to Crescent City Harbor. The bypass is necessary to prevent flooding of the treatment facility and the subsequent discharge of untreated or partially treated wastewater. When bypasses occur, the date, time (duration) and volume of the discharge shall be recorded and submitted as part of the monthly monitoring report.

<sup>2</sup> The Rainbow Trout, Oncorhynchus Mykiss shall be used as the test fish. The test procedure shall be from EPA's "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" Fourth Edition.

<sup>3</sup> Percent Survival

<sup>4</sup> The Abalone, Haliotis Rufescens shall be used for chronic toxicity testing. The procedures manual developed by the Marine Bioassay Project, State Water Resources Control Board shall be used.

### Receiving Water Monitoring

Receiving waters shall be monitored for the following constituents at a designated sample location outside the zone of dilution. Background samples for pH and dissolved oxygen shall be collected from a location immediately outside of the zone of initial dilution of the discharge. Receiving waters shall be monitored for the following:

<u>Constituent</u>	<u>Units</u>	<u>Sample Type</u>	<u>Frequency</u>
Fecal Coliform	MPN/100 ml	Grab	Monthly
Dissolved Oxygen	mg/l	Grab	Monthly
pH	Standard Units	Grab	Monthly

### Solids Disposal

See D. SOLIDS DISPOSAL in the permit for reporting requirements.

### Analytical Methods

Suitable analytical methods are those specified in 40 CFR 136, and Standard Methods for the Examination of Water and Wastewater, (the latest edition) unless otherwise stated. Any other protocols must be approved by the Regional Board prior to use.

All analytical data must be uncensored with the method detection limits and either practical quantitation levels (PQLs) or limits of quantitation (LOQs) identified. Only data from certified laboratories will be accepted.

Aquatic life water quality objectives for cadmium, chromium, copper, lead, nickel, silver, and zinc are based on acid-soluble fractions. Compliance with these objectives shall be determined using the total recoverable method or a method approved by the State Board's Executive Director and EPA.

### Reporting

Monitoring reports shall be submitted to the Board for each month on or before the 15th day of the following month. Copies of each monitoring report shall be sent to:

U.S. EPA, Region IX  
Attn: WTR-7, NPDES/DMR  
75 Hawthorne Street  
San Francisco, CA 94105

Ordered By \_\_\_\_\_  
Lee A Michlin  
Executive Officer

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Order No. R1-2000-##\*

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September 22, 2000

\* Number will be assigned after adoption.

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